

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/IB 03/02244

## A. CLASSIFICATION OF SUBJECT MATTER

**IPC7: H04M 1/02, H04B 1/40**

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

**IPC7: H04M**

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

**SE,DK,FI,NO classes as above**

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## EPO-INTERNAL, WPI

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1091540 A3 (NOKIA MOBILE PHONES LTD.), 11 April 2001 (11.04.01), figure 2, abstract, page 1, part 1-part 9  --	1-16
X	US 2003017848 A1 (G.E.ENGSTROM ET AL), 23 January 2003 (23.01.03), figures 1-8, abstract, page 1, part 14, page 6, part 53  --	1-16
X	US 2003017839 A1 (G.N.MAGER), 23 January 2003 (23.01.03), figures 3-7, abstract, page 1 part 5-8  --	1-16

Further documents are listed in the continuation of Box C.

See patent family annex.

- \* Special categories of cited documents:
- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

15 December 2003

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23-12-2003

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**C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 0211074 A2 (NOKIA MOBILE PHONES LTD), 7 February 2002 (07.02.02), page 5, line 13 - page 7, line 3, figure 2, abstract --	1-16
Y	US 2003036362 A1 (J.BUESSELER ET AL), 20 February 2003 (20.02.03), abstract, page 1,part 1 - part 7 --	1-16
Y	US 2003104791 A1 (G.ENGSTROM ET AL), 5 June 2003 (05.06.03), figure 6, abstract, page 1,part 6 - part 9 --	1-16
Y	US 2003008679 A1 (Y.IWATA ET AL), 9 January 2003 (09.01.03), figure 3, abstract, page 3,part 44-page 5 part 80 -- -----	1-16

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

31/10/03

International application No.

PCT/IB 03/02244

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 1091540 A3	11/04/01	GB 2355126 A GB 9923927 D JP 2001168967 A	11/04/01 00/00/00 22/06/01
US 2003017848 A1	23/01/03	US 2003064689 A US 2003073415 A US 2003073462 A US 2003104791 A US 2003186729 A WO 03009484 A US 2002098876 A US 2003017823 A WO 03009566 A	03/04/03 17/04/03 17/04/03 05/06/03 02/10/03 30/01/03 25/07/02 23/01/03 30/01/03
US 2003017839 A1	23/01/03	WO 03009485 A	30/01/03
WO 0211074 A2	07/02/02	AU 8082701 A	13/02/02
US 2003036362 A1	20/02/03	WO 03017515 A	27/02/03
US 2003104791 A1	05/06/03	US 2003073415 A US 2003017848 A US 2003064689 A US 2003073462 A US 2003186729 A WO 03009484 A US 2002173279 A US 2003130007 A WO 02093956 A US 2002098876 A US 2003017823 A WO 03009566 A	17/04/03 23/01/03 03/04/03 17/04/03 02/10/03 30/01/03 21/11/02 10/07/03 21/11/02 25/07/02 23/01/03 30/01/03
US 2003008679 A1	09/01/03	CA 2202309 A,C CN 1177268 A EP 0804009 A JP 10042022 A JP 2003264621 A US 6009338 A US 6208879 B US 6535749 B	26/10/97 25/03/98 29/10/97 13/02/98 19/09/03 28/12/99 27/03/01 18/03/03